



**SAN MATEO COUNTY PUBLIC HEALTH LABORATORY
TEST INFORMATION**

Section: Syphilis Serology

Test Name: Rapid Plasma Reagin (RPR)

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| Test Includes: RPR Qualitative and Quantitative | |
| <i>Reporting</i> | |
| Results Available: 4 days from receipt | Contact Number: (650) 573-2500 |
| <i>Reference</i> | |
| Method: RPR Card Test (agglutination) | |
| Turnaround Time: 4 days if non-reactive | Reference Range: Non-Reactive |
| Limitations: May not detect a recent infection, or infection in a person with a severely compromised immune system. | Interpretation: Non-reactive indicates that the patient does not have detectable antibody to the infectious agent. Reactive indicates that the patient has detectable antibody to the infectious agent, and depending on the clinical picture, may have a current or past infection. |
| <i>Specimen Requirements</i> | |
| Specimen Collection: Venipuncture | Sample Type: Blood |
| Volume/Amount Required: 7-10 mls whole blood or 5 ml serum or plasma | Preferred Specimen: Serum, plasma |
| Collection/Preservation: Red top or tiger top tube | Storage Instructions: Do not freeze or refrigerate whole blood. Separated serum may be held at 2-8° C. |
| Causes for Rejection: Discrepancy in specimen identification; insufficient quantity of specimen; gross hemolysis | Sample Container: Red top or tiger top tube |
| Sample Test Kit: | Availability: Performed Tuesday and Friday |
| <p>Diagnostic Information: The rapid plasma regain (RPR) card test is a macroscopic, non-treponemal flocculation test for the qualitative and semi-qualitative serological detection of syphilis. Nontreponemal tests for syphilis become reactive 4-6 weeks after infection with titers peaking during secondary to early latent stage. Treatment in the primary or secondary stages usually results in a rapid decline in titer. Treatment given in latent or late stages has less effect on antibody titers and the test may remain reactive at low titers indefinitely. The regain-type antibody binds with the antigen that is composed of a complex of cardiolipin, lecithin and cholesterol particles with activated charcoal; the result of this antigen-antibody reaction is a macroscopic flocculation that shows up as black clumps against the white card. The RPR card test is a screening test and without some other evidence for the diagnosis of syphilis, a reactive nontreponemal test does not confirm <i>Treponema pallidum</i> infection. The RPR card test does not distinguish between syphilis and other treponematoses such as yaws, pinta and bejel. The semi-quantitative RPR card test may be used as a method to follow response to treatment. A four-fold or greater drop in titer between pre- and post-treatment specimens is indicative of response to therapy.</p> | |



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| <i>Specimen Submission</i> | |
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| Request Form: Standard Clinical Test Request form or through computer interface | Specimen Handling: Use Universal Precautions |
| Transport Temperature: Ambient temperature for clotted blood; separated serum at 2-8°C (refrigerated) or -20°C (frozen). | Shipping Requirements: Ship on cold packs (2-8°C), or frozen (-20°C) and mailed on dry ice. |
| <i>Billing</i> | |
| CPT Code(s): Qualitative 86592; Quantitative 86593 | Fees: Qualitative \$5.00; Quantitative \$5.00 |
| Effective Date: July 1, 2008 | |